

CLAIMS

WE CLAIM:

1. A casing section for use in a barrier, said casing section comprising:
a hollow elongated body having a longitudinal axis, a length and a perimeter;
a plurality of female interlock structures defining recesses disposed about said body in a predetermined arrangement, each of said recesses extending substantially parallel to said long axis along said length of said body and including a substantially coextrusive access slot thereinto; and
a male interlock structure attached to said body and extending substantially parallel to said longitudinal axis and extending substantially along said length of said body, said male interlock structure configured to extend into an access slot of a recess of a female interlock slot of another casing section.
2. The casing section of claim 1, wherein said male interlock structure has a T-shaped cross-sectional configuration.
3. The casing section of claim 1, wherein said male interlock includes a leading edge having at least a sharpened edge portion.
4. The casing section of claim 1, wherein said body is constructed of a material selected from the group consisting of ceramic, aggregate and polymeric materials.
5. The casing section of claim 1, wherein a portion of said casing section is constructed of a semipermeable porous material that allows air to pass therethrough.
6. The casing section of claim 1, wherein at least one of said plurality of female interlock structures comprises a female interlock structure disposed on an external surface of said body.
7. The casing section of claim 1, wherein at least one of said plurality of female interlock recesses comprises an interlock chamber configured to receive and interlock with a portion of a male interlock structure extending thereinto and accessible therethrough said access slot.
8. The casing section of claim 7, wherein said interlock chamber comprises a channel inside said body.

9. The casing section of claim 8, further comprising at least one bleed slot in said channel connecting said channel to a bore of said hollow elongated body.

10. The casing section of claim 8, wherein a wall of said channel defines a grout injection manifold in connection with an external wall of said hollow elongated body.

11. The casing section of claim 1, further comprising a frangible seal disposed over said access slot.

12. The casing section of claim 1, wherein said female interlock structures are filled with a sealant.

13. The casing section of claim 12, wherein said sealant comprises a soft grout.

14. The casing section of claim 1, further comprising a central tube inside said hollow elongated body running parallel to said long axis.

15. The casing section of claim 14, further comprising a first reactive layer disposed in said central tube, said first reactive layer configured to react with a contaminant exiting a zone of interest into an opening of said tube.

16. The casing section of claim 15, wherein said reactive layer comprises a replaceable reactive slug.

17. The casing section of claim 15, further comprising a second reactive layer disposed adjacent to said first reactive layer, said second reactive layer configured to react with a contaminant exiting said first reactive layer.

18. The casing section of claim 1, further comprising a corrosion resistant coating disposed on said body.

19. The casing section of claim 18, wherein said corrosion resistant coating comprises a polymer or bonded ceramic.